Name : _____ Score : _____

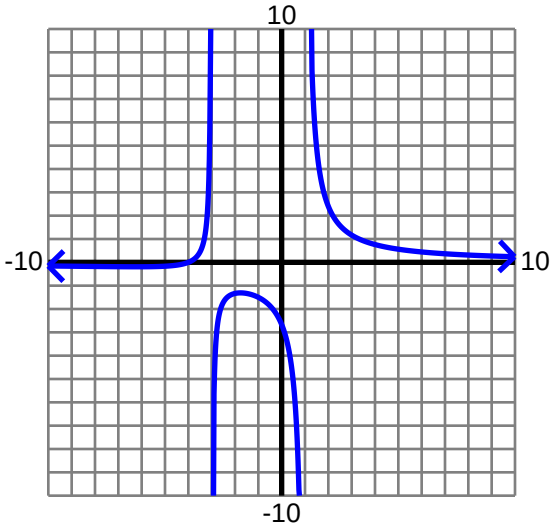
Teacher : _____ Date : _____

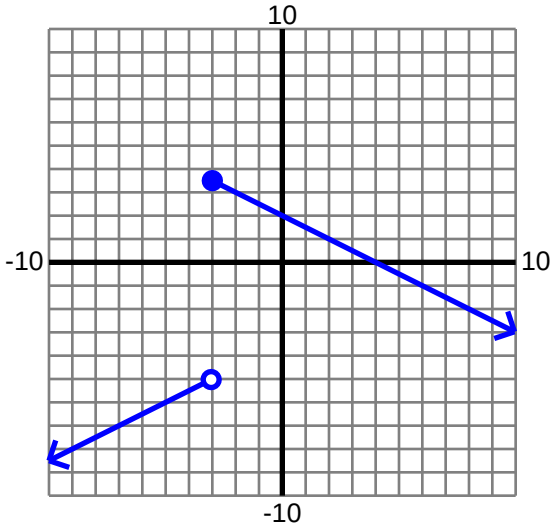
Intervals of Continuity

Find the interval(s) upon which the function is continuous.

1) $b(x) = \dfrac{2(x + 4)}{(x + 3)(x - 1)}$

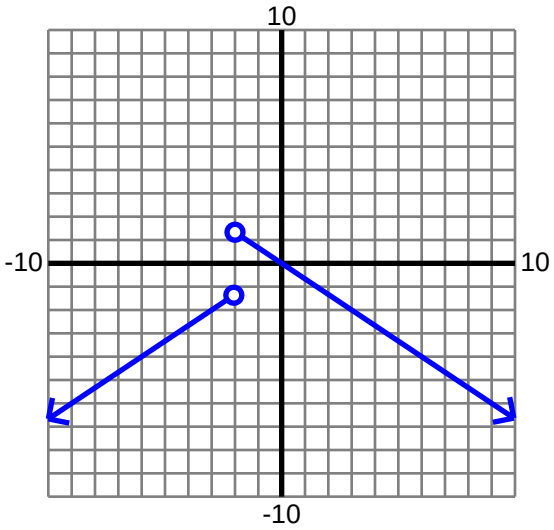
2) $q(x) = \begin{cases} \frac{1}{2}x - \frac{7}{2} & \text{if } x < -3 \\ -\frac{1}{2}x + 2 & \text{if } x \geq -3 \end{cases}$

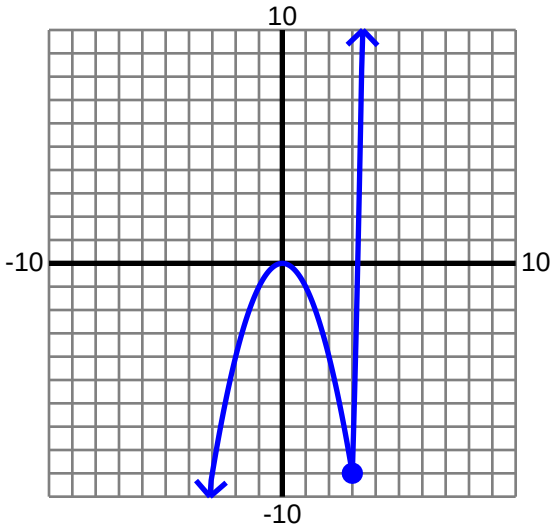




3) $f(x) = \dfrac{-2x\,|\,x + 2\,|}{3(x + 2)}$

4) $h(x) = \begin{cases} -x^2 & \text{if } x \leq 3 \\ 4x^3 - 12x^2 - 3x & \text{if } x > 3 \end{cases}$





Name : _____ Score : _____

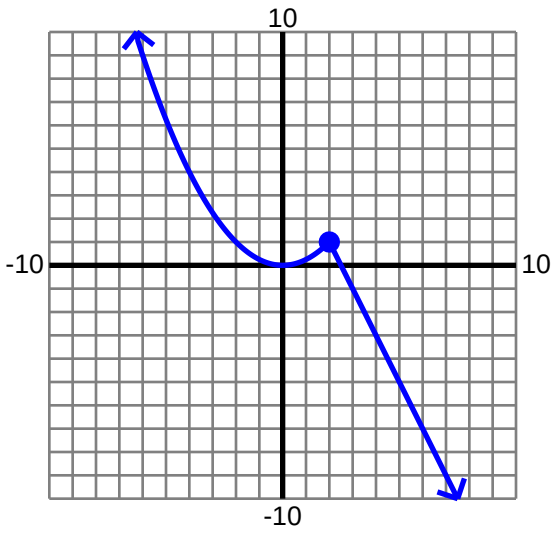
Teacher : _____ Date : _____

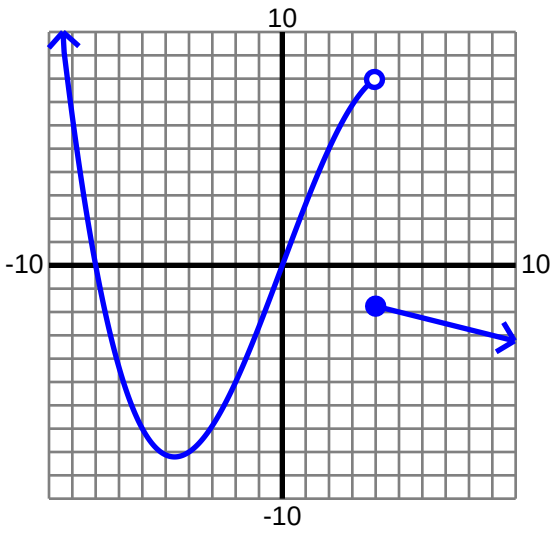
Intervals of Continuity

Find the interval(s) upon which the function is continuous.

5) $g(x) = \begin{cases} \frac{1}{4}x^2 & \text{if } x \le 2 \\ 5 - 2x & \text{if } x > 2 \end{cases}$

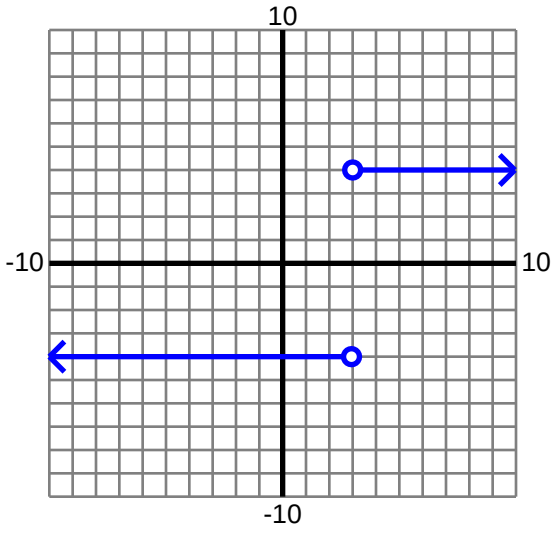
6) $g(x) = \begin{cases} -\frac{1}{24}x^3 + \frac{8}{3}x & \text{if } x < 4 \\ -\frac{1}{4}x - \frac{3}{4} & \text{if } x \ge 4 \end{cases}$

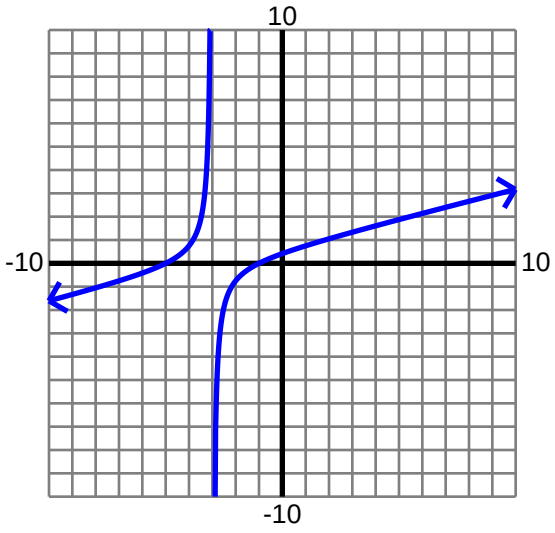




7) $q(x) = \frac{4(x - 3)}{|x - 3|}$

8) $p(x) = \frac{(x + 5)(x + 1)}{4(x + 3)}$





Name : _____ Score : _____

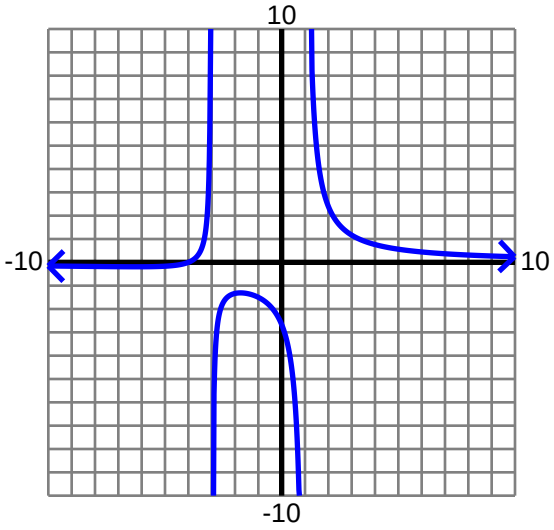
Teacher : _____ Date : _____

Intervals of Continuity

Find the interval(s) upon which the function is continuous.

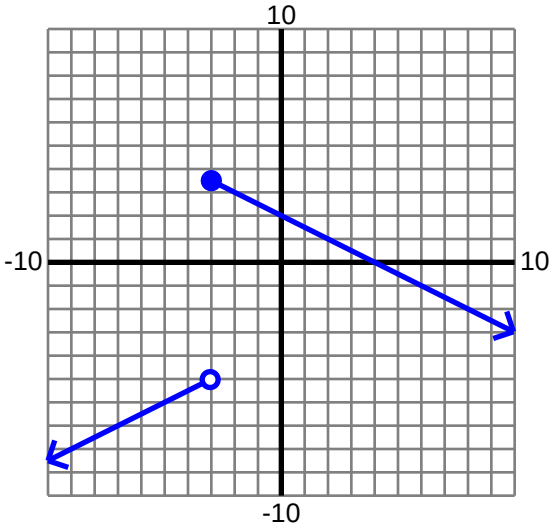
1) $b(x) = \dfrac{2(x + 4)}{(x + 3)(x - 1)}$

(-∞, -3), (-3, 1), (1, ∞)



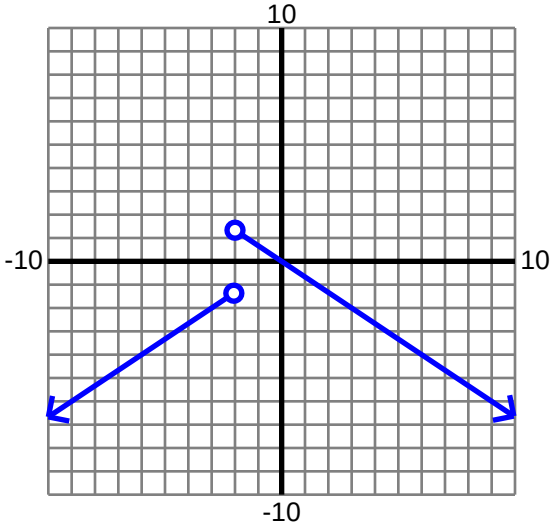
2) $q(x) = \begin{cases} \frac{1}{2}x - \frac{7}{2} & \text{if } x < -3 \\ -\frac{1}{2}x + 2 & \text{if } x \geq -3 \end{cases}$

(-∞, -3), [-3, ∞)



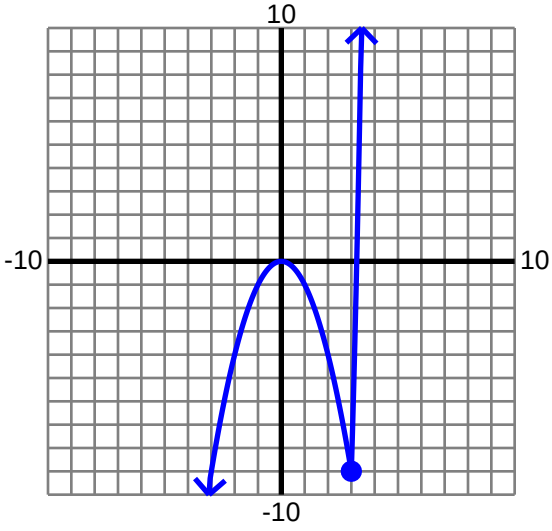
3) $f(x) = \dfrac{-2x\,|\,x + 2\,|}{3(x + 2)}$

(-∞, -2), (-2, ∞)



4) $h(x) = \begin{cases} -x^2 & \text{if } x \leq 3 \\ 4x^3 - 12x^2 - 3x & \text{if } x > 3 \end{cases}$

(-∞, ∞)



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Intervals of Continuity

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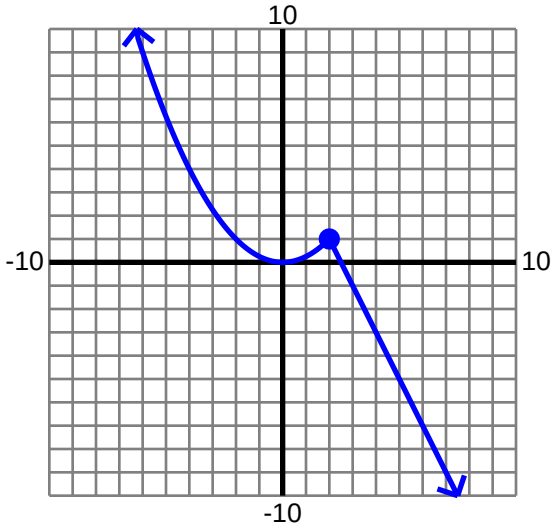
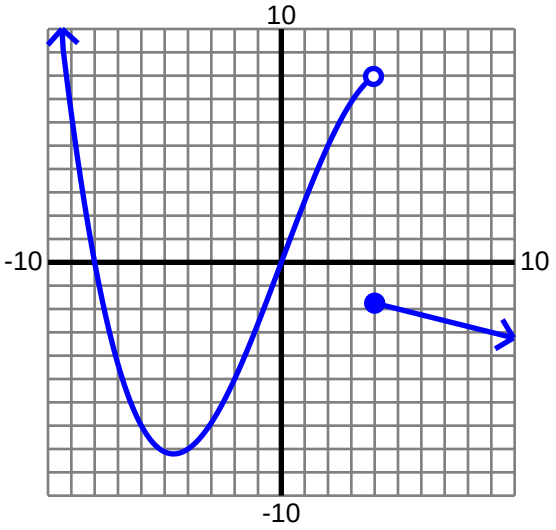
5) $g(x) = \begin{cases} \frac{1}{4}x^2 & \text{if } x \le 2 \\ 5 - 2x & \text{if } x > 2 \end{cases}$

(-∞, ∞)



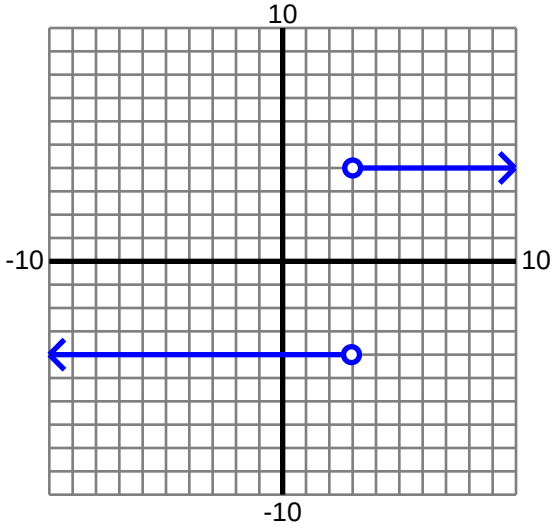
6) $g(x) = \begin{cases} -\frac{1}{24}x^3 + \frac{8}{3}x & \text{if } x < 4 \\ -\frac{1}{4}x - \frac{3}{4} & \text{if } x \ge 4 \end{cases}$

(-∞, 4), [4, ∞)



7) $q(x) = \frac{4(x - 3)}{|x - 3|}$

(-∞, 3), (3, ∞)



8) $p(x) = \frac{(x + 5)(x + 1)}{4(x + 3)}$

(-∞, -3), (-3, ∞)